

R E M A R K S

This is in response to the Official Action of January 27, 2003. Claims 1-3 were pending in this application. Claims 4 and 5 have been added. Support for the amendment can be found throughout the application as filed, and in particular on page 5, line 17-19. No new matter has been added as a result of this amendment.

***The Rejection of Claims 1-3 as WO 99/03630 by Should be Withdrawn***

Claims 1-3 have been rejected under 35 U.S.C. § 102(a) as anticipated by WO 99/03630. The Examiner states that WO 99/03630 teaches a crucible and oscillating member meeting the limitations of Claims 1-3.

In the previous response, Applicant noted that WO '630 does not teach varying the outlet diameter or the slant angle in order to increase the range of drop sizes. In the Final Office Action, the Examiner asserted that this argument is not persuasive, allegedly because (1) the outlet diameter of the instant claims is fixed, not variable and that only the effective outlet diameter is variable, and (2) the oscillation of the head (303) in WO '630 serves to inherently vary both the effective outlet diameter and the slant angle in WO '630.

Applicant disagrees and again submits that WO '630 does not teach varying the outlet diameter or the slant angle in order to increase the range of drop sizes.

The Examiner's assertion that the oscillation of the head (303) by the piezoelectric oscillator (302) inherently varies both the effective outlet diameter and the slant angle is not correct because the slant angle is not constant and it is difficult to analyze the effect from piezoelectric oscillator. Moreover, the effect from the piezoelectric oscillator can be negligible in some operation conditions.

For a claim to be anticipated by a reference, the prior art reference must disclose every element either explicitly or inherently. *See Glaxo, Inc. v. Novopharm Ltd.*, 52 F.3d 1043, 1047 (Fed. Cir. 1995). The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). *See also* Manual of Patent Examining Procedure § 2112.

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." M.P.E.P. § 2112 *citing Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat App & Inter. 1990) (emphasis in original); *see also Acromed Corp. v. Sofamor Danek Group, Inc.*, 253 F.3d 1371, 1383 (Fed. Cir. 2001) (stating that if an element of the claim is not expressly disclosed, it must be "clear that the missing descriptive matter is necessarily present in the ... reference"); *see also In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999) ("Inherency, however, may not be established by probabilities or possibilities.

The mere fact that a certain thing may result from a given set of circumstances is not sufficient.”).

Here, the Office Action has not provided a basis in fact and/or technical reasoning to reasonably support the allegation that the oscillation of the head (303) in WO'630 by the piezoelectric oscillator (302) inherently varies both the effective outlet diameter and the slant angle.

Applicant further notes that new claim 4 requires that the slant angle  $\theta$  ranges between 5 and 30 degrees and that new claim 5 requires that slant angle  $\theta$  range 5 to 45 degrees. WO 99/03630 does not describe varying the slant angle as claimed in either claim 4 or 5. Thus, for this additional reason, claims 4 and 5 are patentable over the cited art.

In view of the foregoing, withdrawal of the rejection under 35 U.S.C. 102(a) of Claims 1-3 as anticipated by WO 99/03630, and prompt allowance of pending claims 1-5 is respectfully requested.

Applicant hereby petitions for an extension of time to respond to the Office Action. The Commissioner is authorized to charge the extension of time fee of \$465.00 to the Deposit Account 02-4377. Applicant does not believe that any additional fee is required in connection with the submission of this document. However, should any such fee be required, or if any overpayment has been made, the Commissioner is hereby authorized to charge any fees, or credit or any overpayments made, to Deposit Account 02-4377. Duplicate copies of this sheet are enclosed.

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